EXHIBIT 4

Laurence H. Beck, MD, FACP 529 Broad Acres Road; Narberth PA 19072

October 14, 2019

Dear Elisa McEnroe:

In re: Russell et al v. ECFMG

I have been asked by Elisa McEnroe of Morgan, Lewis & Bockius LLP to review documents and other materials related to the above litigation, and to provide my expert opinion in such matters. In particular, I have been asked to provide expert opinion on the processes involved, after an International Medical Graduate (IMG) receives certification from the ECFMG, in applying for, and receiving, (1) acceptance into a residency training program; (2) hospital staff privileges; (3) state licensure to practice medicine independently; and (4) Board certification in a medical specialty.

I have separately submitted my curriculum vitae, including publications. I have had no publications in the previous 10 years.

I have not participated as an expert witness at trial or by deposition in the previous 4 years.

I have been contracted for this work at the rate of \$500 per hour.

In preparing this report, I have reviewed the expert reports of Dr. John Charles Hyde, Dr. Jonathan Burroughs, Dr. David Markenson, and Dr. Jerry Williamson. In addition, I have reviewed current published material from the Virginia Board of Medicine and the Maryland Board of Physicians concerning the process and requirements for an IMG to apply for a state license to practice medicine. I have reviewed published criteria from the American Board of Obstetrics and Gynecology, as well as from the American Board of Medical Specialties. I have also reviewed correspondence and records concerning Dr. Akoda from Jersey Shore Medical Center (Jersey Shore Medical Center 000006-000010). I have also reviewed correspondence and records concerning Dr. Akoda from the American Board of Obstetrics and Gynecology (ABOG nonparty 000001-000082).

Most importantly, I have drawn on my expertise in the matters related to the above issues. This expertise includes 50 years of leadership and practice of medicine in Pennsylvania, the District of Columbia, and Florida. During that time, I have held numerous leadership positions requiring participation in, and knowledge of, credentialing of IMG's, including: (1) Chairman of the Residency Selection Committee at the University of Pennsylvania School of Medicine; (2)

Program Director of Internal Medicine Residency at the Hospital of the University of Pennsylvania; (3) Chairman of the Departments of Medicine [at the University of Pennsylvania, Philadelphia Veterans Administration Hospital, Geisinger Medical Center, Georgetown University Medical Center, and Cleveland Clinic Florida] and (4) Associate Chief of Staff of a Hospital [Georgetown University Hospital]. I am Board Certified by the American Board of Internal Medicine (ABIM).

For an IMG to practice medicine in any State in the United States, he/she must pass through numerous steps of application and acceptance.

- He/she must apply to and be accepted into a residency accredited by the
 ACGME (Accreditation Council for Graduate Medical Education). In order to
 be considered as a candidate, the IMG must have, in addition to
 certification by the ECFMG, numerous other documents and undergo
 scrutiny in several areas, as iterated below.
- 2. To receive a license to practice medicine in the State of Maryland and/or the Commonwealth of Virginia, the IMG must (in addition to ECFMG certification) have graduated from an approved medical school, must be of "good moral character", must have completed at least 2 years of an

- accredited residency, and satisfy numerous other criteria, as spelled out below.
- 3. To be accepted as Staff at a Hospital in either of those jurisdictions, the IMG must have an unrestricted state license to practice medicine, and must meet numerous other criteria, as iterated below.
- 4. To achieve Board certification in a medical specialty (which is a voluntary decision, and not required for state licensure), the candidate must pass a certifying examination and be evaluated in numerous other categories, as iterated below.

At each of these steps, the program or institution has a specific set of requirements, which include verification of credentials and usually a personal interview. For application to a residency program, it is the responsibility of the residency program administration to ensure verification of primary-source credentials. Typical additional requirements include: an in-person interview, letters of reference (with contact information for each writer), a current photograph, an up-to-date CV [curriculum vitae], evidence of proficiency in spoken and written English, review of visa status (usually J-1 or green card), and review of any prior residency, with a letter of recommendation from its program director. Following review of an application, the candidate and the residency

program must participate in the National Residency Matching Program (NRMP), wherein each party submits a rank order list of their preference (the list of residency programs for the applicant; the list of candidates for the residency program).

Although it is sufficient for the residency program to accept primary source credential verification via ECFMG certification (or their ERAS program) for the medical credentials, the residency program must pursue the other requirements via their own resources. Based on my extensive knowledge and experience, the above requirements are typical of residency programs in the United States, and represent, in my opinion, a medical profession and industry standard.

An IMG's application to the Virginia and/or Maryland Board of Physicians for a license to practice requires ECFMG certification, as well as numerous other requirements. For either state, there is a personal interview, with verification of identity, reporting of all post-graduation residency or fellowship training, with letter(s) of recommendation from the program director(s), medical school transcripts (usually directly from the medical school), scores of FLEX or Step 3 of the USMLE, employment record from the date of medical school graduation, report of any disciplinary action, and competency in written and spoken English.

Each state also has a separate written licensure exam. The Maryland Board of Physicians states also "The Board requires primary source verification from medical schools, postgraduate training programs, national licensing entities (USMLE, FSMB, NBME, etc) and other state boards". Again, based on my extensive knowledge and experience, the above requirements are typical of state medical licensure boards in the United States, and represent, in my opinion, a medical profession and industry standard.

Similarly, Hospital staff privileges require a separate application process which, for the IMG, requires ECFMG certification, but also (usually) an interview, as well as a number of other areas of review, including one or more personal references with contact information for each, a current photograph, certificates of completion from all residencies and fellowships, letter of recommendation from program director(s), Social Security number, valid passport and/or birth certificate, malpractice insurance history, all licenses, including DEA certificate, a 2-year case log, fingerprinting for federal background check, and a urine drug screen. Furthermore, after achieving hospital staff privileges, all physicians are evaluated on an ongoing basis, usually by the Medical Director's office, on their clinical performance, demeanor, and interactions with patients and staff. Based on my extensive knowledge and experience, the above requirements are typical

of hospitals in the United States, and represent, in my opinion, a medical profession and industry standard.

Certification by an American Board of a medical specialty requires a process involving examination, review of credentials, and evidence of satisfactory performance in that specialty. Typically, for the American Board of Obstetrics and Gynecology, that requires passing a written and oral examination, undergoing a personal interview, review of academic credentials, review of case logs over the previous years, letters of recommendation from residency and fellowship directors, and consideration of any disciplinary action, criminal, or immoral behavior that comes to their attention. Following successful Board certification, a candidate must comply with annual requirements for ongoing educational modules as part of the MOC (maintenance of certification) process.

Dr. Akoda passed both the written and oral examinations of the ABOG, and his credentials were initially approved, so that he was given a one-year Board certification. He successfully complied with the MOC requirements for the first year after his certification, but then failed to continue that activity. As a result, the ABOG did not renew his certification. Subsequently, upon learning of his

criminal behavior, it revoked entirely his Board certification. All these activities were instigated by the ABOG and were not dependent upon input from ECFMG.

CONCLUSIONS

In reviewing the chronology of Dr. Akoda's progression through the above steps leading to medical residency acceptance at Jersey Shore Medical Center and at Howard University, licensure in Virginia and Maryland, staff privileges at Prince George's Hospital Center, and certification by the American Board of Obstetrics and Gynecology, there were numerous opportunities for the above institutions to suspect and investigate Dr. Akoda's fraudulent behavior, except that these opportunities appear to have been repeatedly hidden, or covered up, by Dr. Akoda, through his apparent lies, false documents, and evasiveness. As an example, the residency program director at Howard University certainly should, and I believe, would have pursued the question of why Dr. Akoda had left his third year of residency at Jersey Shore Medical Center. He/she should, and I believe, would have called the program director at Jersey Shore Medical Center and learned that Dr. Akoda was dismissed from that program. It is likely that the Howard University program did not pursue this discrepancy because they were

unaware of this history (because Dr. Akoda apparently either lied or failed to report it, on his application or in a personal interview).

Although residency programs, hospital staff boards, and state medical boards may rely on the ECFMG certification for verification of certain medical credentials, they must use their own resources to ascertain the validity of the numerous other requirements of acceptance (letters of recommendation, visas, social security information, etc.). There is no expectation of these institutions to receive additional information from the ECFMG after they have documented that the certificate is valid.

The primary or root cause of Dr. Akoda's movement through the system, licensure and ability to practice medicine at Prince George's Hospital Center was Dr. Akoda himself and his fraudulent and criminal activities. These activities effectively hid the inaccuracies and lies from all concerned, from the ECFMG, through to the residencies, hospital staff, and state Boards of Medicine. Any alleged harm to patients resulting from his repeatedly dishonest behavior are directly due to his dishonest behavior.

Sincerely yours,

Laurence H. Beck, MD

Laurence H. Beck, MD

August 2019

Curriculum Vitae

Laurence H. Beck, M.D., (retired)

Last Office Address: Department of Internal Medicine Cleveland Clinic Florida Health and Wellness Center

525 Okeechobee Boulevard West Palm Beach, Florida 33401

Telephone Numbers: (561) 804-0200 (work)

(561) 804-0222 (fax)

Home Address:

529 Broad Acres Road; Narberth PA 19072

Social Security Number: xxxx Date of Birth: April 3, 1941 Place of Birth: Wilmington, DE

Marital Status: Married: Joan McDonald Beck Children: Laurence H. Beck, Jr., M.D., Ph.D. 1968

Katherine G. Beck, M.D. 1970 David M. Beck, M.D. 1984

Licensure: Massachusetts, 1967 (Expired 12/31/69)
Pennsylvania, 1972 (#MD-013995-E; Expired: 12/31/94)
District of Columbia, (#20811) (Expired 12/31/2000)
Florida (ME 78867) effective through Jan 31, 2017

Specialty Certification: American Board of Internal Medicine, 1972

American Board of Internal Medicine, Nephrology, 1974

Education:

9/58 - 6/62 B.A. magna cum laude, Amherst College

9/62 - 6/66 M.D.magna cum laude, Harvard Medical School

Postgraduate Training and Fellowship Appointments:

6/66 - 6/67 Intern in Medicine, Massachusetts General Hospital, Boston, MA

Chairman: Alexander Leaf, M.D.

6/67 - 6/68 Assistant Resident in Medicine, Massachusetts General Hospital,

Boston, MA - Chairman: Alexander Leaf, M.D.

7/70 - 6/73 Postdoctoral Trainee, Renal-Electrolyte Section, Department of Medicine,

University of Pennsylvania School of Medicine,

Chief: Martin Goldberg, M.D.

Faculty Appointments:

7/73 - 6/79 Assistant Professor of Medicine, Department of Medicine, University of Pennsylvania School of Medicine

7/79 - 6/83 Associate Professor of Medicine, University of Pennsylvania School of Medicine

7/83 - 6/88 Professor of Medicine, University of Pennsylvania School of Medicine

7/83 - 6/86 Adjunct Professor of Medicine, Medical College of Pennsylvania

7/86 - 6/88 Sylvan Eisman Professor of Medicine, University of Pennsylvania

7/86 - 6/88 Clinical Preceptor, School of Nursing, University of Pennsylvania

7/89 - 6/94 Professor of Medicine, Jefferson Medical College, Thomas Jefferson University

6/94 - 8/99 Professor of Medicine, Georgetown University Medical Center

11/00 -6/12 Professor of Clinical Internal Medicine, Ohio State University College of Medicine

5/03 -6/12 Affiliate Professor of Medicine University of South Florida

3/14-current Adjunct Professor of Medicine, University of Pennsylvania, Perelman School of Medicine

Other Academic Appointments:

7/73 - 6/76 Chief, Renal-Electrolyte Section, Pennsylvania Hospital

1975 - 88 Internship Selection Committee in Medicine (Chairman 1976-82),

Hospital of the University of Pennsylvania

7/75 - 6/82 Education Officer, Department of Medicine, Hospital of the University of Pennsylvania

1977-82 Medical Board, Hospital of the University of Pennsylvania

1978-82 Associate Chairman (for Curriculum), Department of Medicine, Hospital of the University of Pennsylvania

1981-88 Committee on Appointments and Promotions, Department of Medicine Hospital of the University of Pennsylvania

1982-86 Vice-Chairman, Department of Medicine, University of Pennsylvania School of Medicine

1982-86 Chief, Medical Service, Veterans Administration Medical Center, Philadelphia, Pennsylvania (PVAMC)

1983-86 Strategic Planning Board. (Chairman), Veterans Administration Medical Center,

Philadelphia, Pennsylvania

1986-88 Director, Program in Geriatric Medicine, University of Pennsylvania

1987-88 Counselor to the President for Health Policy, University of Pennsylvania

1987-88 Medical Director, Foulkeways Life Care Community, Gwynedd,

Pennsylvania

1987-88 Director, Ralston-Penn Center

1988-90 Chairman, Departments of Medicine, Geisinger Health System

1990-94 Executive Vice-President, Clinical Program & Process Improvement, Geisinger Health System

1994-99 Chief, Division of General Internal Medicine, Georgetown University Medical Center

1999 -2007 Chairman, Dept of Internal Medicine, Cleveland Clinic Florida

2004 - 07 Chairman, Division of Medicine, Cleveland Clinic Florida

2007-12 Medical Director, Cleveland Clinic Florida Health and Wellness Center

Awards, Honors, and Membership in Honorary Societies:

1961 Phi Beta Kappa

1961 Sigma XI

1965 Alpha Omega Alpha

1974 Edward Viner Teaching Award, Pennsylvania Hospital

1975 Medical Student Government Clinical Teaching Award,

University of Pennsylvania

1978 Donna K. McCurdy House Staff Teaching Award, University of Pennsylvania

1979 Lindback Foundation Teaching Award, University of Pennsylvania

1980 Top Doctor, Philadelphia Magazine

1984 Dripps Memorial Teaching Award, University of Pennsylvania

1990 Blockley-Osler Award for Excellence in Teaching, Jefferson Medical College

1992 Second Annual Health and Wellness Award, The Quadrangle,

Haverford, Pennsylvania

1996 Top Doctor, Washingtonian Magazine

1998 Inclusion in The Best Doctors in America

1999 Lawrence H. Kyle House Staff Teaching Award; Department of Medicine,

Georgetown University Medical Center

2004-12 Best Doctors in Florida

Membership and Positions in Professional and Scientific Societies:

National Societies:

American Society of Nephrology 1972-1999

International Society of Nephrology 1972-1988

American Federation for Medical Research 1971-1988

Society for Research and Education in Primary Care Internal Medicine

(Scientific Program Chairman, 1980); now Society for General Internal Medicine (SGIM) 1978-1999

American College of Physicians (Fellow) 1978-current; Regional

Representative for the University of Pennsylvania Department of Medicine

(1985-88); Governors

Advisory Committee (1989-92)

Society for Medical Decision-Making 1975-1999

American Geriatrics Society 1985-1990; (Member, Education Committee

and Public Policy Committee; Co-Chair, Geriatric Education Retreat,

Jasper, Alberta (August1998)

Gerontological Society of America 1985-1990

American Board of Internal Medicine (Pre-Test Committee 1988-91;

Ad-Hoc Test Committee 1992-94)

American Medical Association 1996-current

American Group Practice Association 1988-1994

Reviewer, American College of Physicians, Medical Knowledge Self-

Assessment Program (1993-94)

National Board of Medical Examiners (Step 3 CCS Committee 1995-2006;

Step C IRC Committee 2006 -current)

Peer Review Appeals Panel, Residency Review Committee in Medicine,

ACGME, Chicago, Ill. 1990-2000

Local Societies:

Philadelphia Chapter, ADRDA (Member, Scientific Advisory Board, 1987-88)

Northeastern Pennsylvania Chapter, ADRDA (Member, Advisory Board, 1988-91)

Philadelphia College of Medicine, Section on Geriatrics/Gerontology, 1987-

88

Pennsylvania Medical Society 1988-94

Montour County Medical Society 1988-94

Palm Beach County Medical Society 2007-current

Editorial Positions:

1984-86 Editor, Internal Medicine Newsletter (E-Journal, Amnet, American Medical Network)

1987-90 Editorial Board, Journal of Gerontology, Medical Science

1988-93 Editorial Board, Annals of Internal Medicine

1999 -2003 Editorial Board, Advances in Renal Replacement Therapy

2016- Review Board, HealthWeb Navigator (HNW)

Ad hoc manuscript reviewer for various journals over the course of career, including: Journal of Clinical Investigation, Annals of Internal Medicine, American Journal of Medicine, New England Journal of Medicine, Archives of Internal

Medicine,

Journal of General Internal Medicine, Journal of the American Geriatrics Society. In last 4 years (2000-2014) reviews only for JGIM and Annals of Internal Medicine

University and Hospital Service:

1975-83 Member, Curriculum Committee, University of Pennsylvania School of Medicine (Chairman, 1978-83)

1975-88 Career Counseling Committee for Medicine (Chairman 1977-82)

1977-88 Graduate Medical Education Subcommittee of the Long-range

Planning Committee of the School of Medicine

1979-88 Undergraduate Medical Education Subcommittee of the Long-range Planning Committee of the School of Medicine

1979-88 Affiliated Hospitals Subcommittee of the Long-range Planning Committee of the School of Medicine

1986-88 Students Standards Committee, School of Medicine

1987-88 Search Committee (Chairman): Dept. of Anesthesia, University of Pennsylvania

1988 University of Pennsylvania Committee on AIDS Policy (Chairman)

1988-92 Finance Committee, Geisinger Clinic

- 1988-90 Benefits Committee, Geisinger Clinic
- 1988-92 Board of Governors, Geisinger Clinic
- 1988-92 Finance Committee, Geisinger Medical Center
- 1988-90 Benefits Committee, Geisinger Medical Center
- 1988-92 Governance Committee, Geisinger Medical Center
- 1991-92 Clinical Program Committee (Chairman), Geisinger Health System
- 1993-94 Executive Management Staff, Geisinger Health System
- 1993-94 Operations Committee, Geisinger Health System
- 1993-94 Clinical Practice Committee (Co-Chair), Geisinger
- 1994-99 Quality Council (Chair), Georgetown University Medical Center
- 1994-99 Associate Medical Director, Georgetown University Medical Center
- 1996-99 Chair, Clinical Resource Steering Committee, Georgetown University

Medical Center

1996-99 Chair, Quality Patient Care Coordinating Committee, Georgetown

University Medical Center

1996-99 Executive Staff, Georgetown University Medical Center

2000-03 Board of Governors, Cleveland Clinic Florida

2000 -07 Performance Improvement Council (Chair), Cleveland Clinic Florida

2003 -07 Chair, Peer Review Committee (Chair), Cleveland Clinic Florida

Non-medical Organizations

2014 Advisory Board, Naxion (national market research firm)

Teaching Activities (previous):

1. University of Pennsylvania:

Director, Internal Medicine Residency

Director, Clerkship in Medicine

Preceptor, Internal Medicine Clinic

4-6 months/year inpatient attending in general internal medicine and nephrology

Lectures in numerous courses in Pathophysiology, Geriatrics, Internal Medicine

Board Review, Medical Decision-making

- 2. Jefferson Medical College:
- 1-2 months per year inpatient attending, general internal medicine

Preceptor, 3rd. year clerkship students

Preceptor, resident clinic

- 3. Georgetown University:
- 1-2 months per year inpatient attending, general internal medicine

Preceptor, general medicine resident clinic; day per week

Resident Morning Report (one day/week)

Group Leader, Problem Based Learning, 1st year basic science courses

4. Cleveland Clinic Florida:

Morning Report; once per week

General Medicine resident clinic preceptor; 1/2 day per week

Outpatient resident teaching; daily

Inpatient attending/teaching rounds; 4 months per year

Member, Graduate Education Committee

Co-Chair, Continuing Education Committee

Current teaching activities:

Inpatient teaching/attending of Univ. of Pa medical students and residents at Philadelphia VA Medical Center, 4 weeks per year.

4. Lectures by invitation (since 1987):

March 6, 1987 The Aging Kidney - Medical College of Virginia and

Geriatric Education Center at Virginia Commonwealth

University, Richmond, VA

March 19, 1987 Alzheimer's Diseases Park Towne Residents Association, Philadelphia, PA

April 4-5, 1987 Kidney function and disease in the elderly" and The kidney and uric acid disorders; American College of Physicians

Annual Meeting, New Orleans, LA

April 12, 1987 Psychologic & Emotional Aspects of Getting Older - St.

Peter's Men's Club Great Valley, PA

May 14, 1987 Decision Analysis in Geriatric Medicine - American

Geriatrics Society Annual Meeting, New Orleans, LA

June 11, 1987 The demography of aging, York Hospital Medical Grand Rounds, York, PA

October 8, 1987 Calcium and phosphorus disorders - Presbyterian Medical Center, Philadelphia, PA

December 3, 1987 Use of video tapes in residency teaching - Teaching Internal Medicine Annual Workshop, American College of

Physicians, Meeting, New Orleans, LA

February 19, 1988 Drug-induced renal syndromes" - Riddle Memorial Hospital, Media, PA

March, 3-5, 1988 Urinary incontinence in the elderly, Renal function and disease in the elderly. - American College of Physicians

Annual Meeting, New York City

March 19, 1988 Health maintenance and disease prevention in the $\,$

elderly. Geriatric Board Review Course, Lancaster, PA

March 24, 1988 Why don't old people live longer? York Hospital, York, PA

June 3, 1988 Appropriate utilization of electrolytes, BUN, creatinine, and

urinalysis. Common Diagnostic Tests Symposium, Case

Western Reserve School of Medicine, Cleveland, Ohio

Sept. 1, 1988 Health promotion and disease prevention in the elderly.

Cooper University of Medicine and Dentistry of New

Jersey, Camden, NJ

November 8, 1988 Renal disease and dysfunction in the elderly, Health

promotion in the elderly, The Medical Center, Beaver, PA

June 12, 1989 Principal Speaker: Geisinger Medical Center House Staff

Graduation

June 14-15, 1989 Visiting Professor, Division of General Medicine, Cleveland

Metropolitan General Hospital, Cleveland, Ohio

Sept. 15, 1989 Serum electrolytes, BUN and creatinine American College

of Physicians Course: Which Tests and Why? A Science of

Diagnostic Testing for the Cost Containment Era.

Rochester, NY

Sept. 28-29, 1989 Visiting Professor, Williamsport Hospital, Williamsport, PA

November 8, 1989 Disorders of uric acid metabolism. Contemporary Issues in

Internal Medicine - Danville, PA

March 11-14, 1990 Kidney disease and Dysfunction of the Elderly and

Hyponatremia and Hypernatremia: Diagnosis and

Management and Disorders of Uric Acid Metabolism

Internal Medicine Seminar, Orlando, Florida

May 23, 1990 Kidney function & disease in the elderly Urinary

Incontinence Geisinger Wyoming Valley Hospital

June 26-28, 1990 Older Adult Round Table; Health Maintenance in the Older

Adult with Renal Disease; Philadelphia, PA

Aug. 30-31, 1990 Growing old with your kidneys - Medical Grand Rounds;

Dartmouth Medical Center, Hanover, NH

January 28, 1991 Disorders of Uric Acid Metabolism - Medical Grand

Rounds; Pennsylvania Hospital, Philadelphia, PA

February 9, 1991 Disorders of Water Metabolism: Hypo-and-Hypernatremia,

16th Annual Concepts in Clinical Practice, 1991, Days Inn,

Danville, PA

March 6, 1991 Dementia, Contemporary Issues in Internal Medicine,

Geisinger Medical Center, Danville, PA

April 25, 1991 Growing old with your kidneys - Medical Grand Rounds

Jefferson Medical College, Philadelphia, PA

May 9-11, 1991 Renal Disease & Dysfunction in the Elderly and

Dehydration: Pathophysiology and Management - 48th

Annual Scientific Meeting of American Geriatrics Society.

Chicago, IL

Sept. 25, 1992 Memory Loss, Dementia, and Alzheimer's Disease, the

Quadrangle, Haverford, PA

April 22-24, 1992 Screening for Renal Disease - National Kidney Foundation,

Chicago, IL

June 2, 1993 Geisinger's Integrated System and Managed Care

University of Pittsburgh, Pittsburgh, PA

June 28-29, 1993 The Geisinger Integrated Health Care System - Keystone

Executive Forum, Denver, Colorado

October 1, 1993 Clinical Guidelines - Why Do We Need Them? - Visiting

Professor, Williamsport Hospital, Williamsport, PA

Dec. 9-10, 1993 The Geisinger Integrated Delivery System - Executive Forum on Physician and Hospital Integration - Scottsdale, AZ

April 18, 1994 Integrated Health Systems, Executive Staff, Georgetown University Medical Center

June 27-28, 1994 The Geisinger Integrated Delivery System, Executive Forum (Quorum); Coronado, CA

Feb. 13-15, 1995 Building an IDN: The Physician Perspective, Mercy Health Services Assembly; Ponte Vedra Beach, FL

July 8-12, 1996 Course Director, ACP Washington Area Internal Medicine Board Review Course; Washington, DC

Nov. 3-5, 1996 Course Director, Primary and/or Principal Care for the ESRD patient. American Society of Nephrology; New

Orleans, LA

May 15, 1997 Genitourinary and fluid-electrolyte issues in the elderly. - Internal Medicine Grand Rounds; Henry Ford Hospital,

Detroit, Michigan

July 7-11, 1997 Course Director: Washington, D.C., Internal Medicine Board Review Course

August 18, 1997 Cost-Effectiveness approach to cardiovascular interventions in the elderly; International Association of Gerontology Congress, Singapore

July 13-17, 1998 Course Director: Washington, D.C., Internal Medicine Board Review Course

August 3, 1998 Fluid and electrolyte balance in the elderly.; Geriatric Education Retreat; (American Geriatrics Society and

Hartford Foundation), Jasper, Alberta, Canada

October 19, 1998 Examining the Needs and Challenges of Academic

Centers (round table member); Sonoma Mission Inn,

Sonoma,

California

November 17, 1998 Disease Management Round Table; University of Pennsylvania

Health System; Philadelphia, PA

February 5, 1999 Primary Care National Advisory Council: Dallas, Texas April 23 - 24, 1999 Preventive Medicine Update and Screening and the

Periodic Health Exam; American College of Physicians

Annual Session, New Orleans, LA.

July 12 - 16, 1999 Course Director: Washington, D.C. Internal Medicine Board Review Course

October 12-13, 1999 Visiting Professor and C. Thorpe Ray Grand Rounds speaker at Tulane University Medical Center

April 14, 2000 Update in Preventive Medicine, American College of Physicians Annual Session, Philadelphia, PA March 29, 2001 Update in Preventive Medicine, American College of College of Physicians Annual Session, New Orleans, LA March 30, 2001 Screening and the Annual Physical Examination, American College of Physicians Annual Session, New Orleans, LA

Principal Investigator of Grants:

Delaware Valley Geriatric Education Center, Bureau of Health Manpower (HHS), 1985-88 Veterans Administration Geriatric Physician Fellowship Program. Veterans Administration, 1986-91.

Resident Physician Training Program in Geriatrics, Administration on Aging, 1986-87 Essay exam of clinical judgment and decision-making skills. American Board of Internal Medicine, 1987-89.

Training Grant, (Training Physicians for Leadership in Academic Geriatrics); John A. Hartford Foundation; 1988-91.

Training Grant (Faculty Training Project in Geriatric Medicine and Dentistry), Bureau of Health Professions (HHS), 1988-91.

Co-Investigator:

Outcome Assessment; Patients with Biliary Tract Disease; AHCPR:

Grant # 1 PO1 HS 06481-01; 1990-95; 10% effort.

Develop, Apply, and Review Criteria and Educational Outreach Programs

Based upon Practice Guidelines (AHCPR/AMPRC): 1992-94; 10% effort.

High cost Medicare Beneficiaries, Kaiser Foundation, 2.5% effort, 1995-96.

Project Phoenix: Scrutinizing a Telemedicine Testbed. National Library of Medicine (Seong K. Mun, Ph.D., principal investigator); 6.25% effort 1996-99.

An Educational Model for Tomorrow: The Kaiser Permanente-Georgetown University Residency for Primary Care Physicians in Managed Care" Pew Charitable Trust. 5% effort 1997-2000

Bibliography:

Original Papers, Review, Editorials:

- 1. Yost, HT Jr., Glickman RM, Beck, LH: Studies on the effects of irradiation of cellular particulates. IV. The time sequence of phosphorylation changes in vivo. Biological Bulletin 1964; 127: 173-185.
- 2. Yost, HT Jr., Richmond SS, Beck LH: Studies in the effects of irradiation of cellular particulates. V. Acceleration of recovery of phosphorylation of polyanions. Biological Bulletin, 1964; 127:526-537.
- 3. Nathan DG, Beck LH, Hampers CL, Merrill JR: Erythrocyte production and metabolism in anephric and uremic men. Ann. N.Y. Acad. Sci. 1968; 149:539-543.
- 4. Nathan DG, Beck LH, Hampers CL, Button L: Hematopoiesis in renal failure. In Kidney Hormones, Academic Press, 411-429, 1971.
- 5. Beck LH, Goldberg M: The effects of acetazolamide and parathyroidectomy on tubular reabsorption of sodium, calcium and phosphate. Am J. Physiol.

1973:224:1136-1142.

- 6. Agus ZS, Gardner LB, Beck LH, Goldberg M: The effects of parathyroid Hormone on the interrelationships between renal tubular reabsorption of calcium, phosphate, and sodium. Am J. Physiol. 1973; 224:1143-1148.
- 7. Goldberg M, Beck LH, Puschett JB, Schubert JJ: Sites of action of benzothiadiazines, furosemide and ethacrynic acid. Excerpta Medica, International Congress Series No. 1973; 268:135-144.
- 8. Beck LH, Senesky D, Goldberg M: Sodium-independent active potassium reabsorption in proximal tubule of the dog. J. Clin. Invest. 1973: 52:2641-2645.
- 9. Beck LH, Goldberg M: Mechanism of the blunted phosphaturia in saline-loaded thyroparathyroidectomized dogs. Kidney Int. 1974; 6:18-23.
- 10. Beck LH, Goldberg M: Diuretic Therapy. Primary Care 1974; 1:165-178.
- 11. Goldfarb S, Beck LH, Agus ZS, Goldberg M: Tubular sites of action of dibutyryl cyclic AMP on renal phosphate reabsorption. In Phosphate Metabolism: Kidney and Bone: Nouvelle Imprimerie Fournie, Paris, pp. 135-144, 1976.
- 12. Mitnick PD, Beck LH: Hypouricemia and malignancy: a new case of xanthinuria. Arch. Int. Med. 1979; 137-1187.
- 13. Beck LH: Hypouricemia in the syndrome of inappropriate antidiuretic hormone secretion. NEJM 1979; 301:528-530.
- 14. Rudnick MR, Coyle JF, Beck LH, McCurdy DK: Acute massive hydrothoraxy complicating peritoneal dialysis, report of 2 cases and a review of the literature. Clin. Nephrol. 1979; 12:38-44.
- 15. Beck LH: Edema states and the use of diuretics. Med.Clin. N. Amer. 1981: 65:291-301.
- 16. Beck LH: Clinical disorders of uric acid metabolism. Med. Clin. N. Amer. 1981; 65:401-411.
- 17. Beck LH, Kaplan NM, Moroczek WJ, Paulschock BZ: When potassium is needed. Patient Care 1982; 16:63-94.
- 18. Williams SV, Eisenberg JM, Kitz, DS, Carroll JG, Beck, LH, Rubin SI, Ruff GE: Teaching cost-effective diagnostic test use to medical students. Medical Care 1984; 22:535-542.
- 19. Cebul RD, Beck LH, Carroll JG, Eisenberg JM, Schwartz JS, Strasser AM, Williams SV: A course in clinical decision-making adaptable to diverse audiences. Med Decis. Making 1984; 4:285-296.
- 20. Beck LH: An elderly man with renal failure. Medical Grand Rounds 1984; 3:128-141.
- 21. Beck LH: Requiem for gouty nephropathy. Kidney Internat. 1986; 3:128-141.
- 22. Beck LH, Lavizzo-Mourey RJ: Geriatric Hypernatremia. Ann. Int. Med. 1987: 107:768-769.
- 23. Beck LH: Renal function and disease in the elderly. Del Med J. 1988; 60:363-368.
- 24. Beck LH: Maintaining health with renal disease or dysfunction.

- Geriatrics. 1988; 43 (Suppl):66-74.
- 25. Beck LH: Geriatric Medicine 1989 Where are we now? Pennsylvania Med. 1989; 92(11):34-36.
- 26. Siegler EL, Beck LH: Stiffness: a pathophysiologic approach to diagnosis and treatment. J. Gen. Internal Med. 1989; 4:533-540.
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